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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/469,949	12/21/1999	SCOTT A. LOVINGOOD	2126	5585
25280	7590	07/29/2003	EXAMINER	
MILLIKEN & COMPANY 920 MILLIKEN RD PO BOX 1926 SPARTANBURG, SC 29304			PIERCE, JEREMY R	
		ART UNIT	PAPER NUMBER	
		1771		

DATE MAILED: 07/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/469,949	LOVINGOOD, SCOTT A.
Examiner Jeremy R. Pierce	Examiner	Art Unit
		1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10 June 2003.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 16-29 is/are pending in the application.

4a) Of the above claim(s) 16-21 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 22-29 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a)  The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. _____. _____.	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Continued Prosecution Application***

1. The request filed on June 10, 2003 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/469,949 is acceptable and a CPA has been established. An action on the CPA follows.

### ***Response to Amendment***

2. Applicant's amendment submitted on June 10, 2003 has been entered. Claims 1 and 3-15 are now cancelled. Claims 22-29 have been added. Dependent claims 17-21 are all dependent upon claim 15. However, claim 15 is cancelled. It appears that claims 17-21 should depend upon claim 16 instead. Claims 16-29 are currently pending.

### ***Election/Restrictions***

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 16-21, drawn to a method for producing a non-union dyed woven fabric, classified in class 8, subclass 481.
  - II. Claims 22-29, drawn to a chambray fabric, classified in class 442, subclass 213.

The inventions are distinct, each from the other because of the following reasons:

4. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case weaving a fabric with warp yarn that has been dyed and filling yarn that has not been dyed would create the same product as weaving two different fiber types and differentially dyeing the two after weaving.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. Since there is no indication in the CPA application that a change in election is desired, prosecution is being continued on the invention elected and prosecuted by applicant in the prior application. See MPEP § 819. Therefore, claims 16-21 are withdrawn from consideration and claims 22-29 are now considered on the merits.

***Claim Rejections - 35 USC § 102/103***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 22, 23, and 25-29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gadoury (U.S. Patent No. 5,830,574).

Gadoury teaches that synthetic melamine fiber and cellulose fiber can be woven together and dyed so that either the synthetic fiber or the cellulose fiber is dyed and the other remains undyed giving a chambray appearance (Abstract). In one embodiment (column 6, lines 20-40), the synthetic melamine is dyed and the cellulose fiber remains undyed. Although Gadoury does not explicitly teach the limitations of tensile strength or tear test measurement values, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. strong synthetic fibers, such as melamine and cellulosic fibers) and in the similar production steps (i.e. weaving one set of yarns in the warp direction and the other set of yarns in the weft direction) used to produce the fabric. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed strength and tear properties would obviously have been provided by a person of ordinary skill in the art as adjusting result effective variables. Tensile strength and tear strength are known as desirable properties in the fabric art, and can be attained by providing stronger fibers with increased filaments or deniers. It would have been obvious to one having ordinary skill in the art to use stronger fibers in the fabric of Gadoury in order to improve the strength of the fabric, since it has been held that

discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. With regard to claim 23, Gadoury does not disclose a weight for the fabric. However, discovering an optimum weight value suitable for the intended use would only derive routine skill in the art. It would have been obvious to one skilled in the art to make the fabric taught by Gadoury weigh 4 to 8.5 ounces per square yard, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. With regard to claims 26 and 27, the melamine fibers can be blended with polyester (column 3, lines 43-52). With regard to claims 28 and 29, Gadoury discloses using rayon and cotton for the cellulosic yarn (column 2, line 28).

#### ***Claim Rejections - 35 USC § 103***

10. Claims 22, 23, and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collier (U.S. Patent No. 5,487,936) in view of Gadoury.

Collier discloses a woven fabric where the warp threads have a different composition than the weft threads (Abstract). Either the warp or the weft is composed of at least one multi-filament yarn, and the other is optionally composed of spun fiber yarn (column 2, lines 31-44). The spun yarns are made of cotton (column 3, line 19) and the filament yarns are made of polyester, polyamide, polypropylene, etc. (column 3, lines 25-27). Thus, when the fabric is made with synthetic filaments in the warp

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direction, then cellulosic yarns are used in the weft direction. Collier teaches the woven fabric to be differentially dyed where the synthetic yarns are dyed one color and the cellulosic yarns are dyed another color (column 2, lines 55-60). Collier does not teach to leave the cellulosic yarns to remain undyed, but does point out that numerous dye routes can be used in the invention to create a wide variety of fabrics with varying visual effects (column 10, lines 15-18). Gadoury teaches a fabric consisting of synthetic yarns in either warp or weft and cellulosic yarns in the other direction, where only the synthetic yarns are dyed and the cellulosic yarns remain undyed in order to give a chambray appearance (Abstract). It would have been obvious to one skilled in the art to dye only the synthetic warp yarns of the fabric taught by Collier in order to create a fabric with a chambray appearance and to save on the amount of dye used, as taught by Gadoury. Although Collier does not explicitly teach the limitations of tensile strength or tear test measurement values, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. polyester fibers and cellulosic fibers) and in the similar production steps (i.e. weaving one set of yarns in the warp direction and the other set of yarns in the weft direction) used to produce the fabric. The burden is upon the Applicant to prove otherwise. In the alternative, the claimed strength and tear properties would obviously have been provided by a person of ordinary skill in the art as adjusting result effective variables. Tensile strength and tear strength are known as desirable properties in the fabric art, and can be attained by providing stronger fibers with increased filaments or deniers. It would have been obvious to one having ordinary skill in the art to use stronger fibers in

the fabric of Collier in order to improve the strength of the fabric, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. With regard to claim 23, Collier does not disclose a weight for the fabric. However, discovering an optimum weight value suitable for the intended use would only derive routine skill in the art. It would have been obvious to one skilled in the art to make the fabric taught by Collier weigh 4 to 8.5 ounces per square yard, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

11. Claims 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gadoury in view of Goldthwait (U.S. Patent No. 2,404,837).

Gadoury does not teach the fabric material to exhibit a stretch between 10 and 16% in the direction of the cellulosic fibers. Goldthwait teaches a method for supplying a fabric made of cotton with a degree of stretchability in either the warp or weft direction (column 1, lines 8-14). The stretch values in Table I (column 4, lines 42-53) fall within the claimed range. It would have been obvious to one skilled in the art to make the cotton fibers of the Gadoury fabric exhibit a degree of stretchability in the weft direction as taught by Goldthwait in order to create a fabric that can stretch and be better suited for use in clothing.

12. Claims 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collier in view of Gadoury and further in view of Goldthwait.

Collier and Gadoury do not teach the fabric material to exhibit a non-uniform stretch between 10 and 16% in the direction of the cellulosic fibers. Goldthwait teaches

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a method for supplying a fabric made of cotton with a degree of stretchability in either the warp or weft direction (column 1, lines 8-14). The stretch values in Table I (column 4, lines 42-53) fall within the claimed range. It would have been obvious to one skilled in the art to make the cotton fibers of the Collier fabric exhibit a degree of stretchability in the weft direction as taught by Goldthwait in order to create a fabric that can stretch and be better suited for use in clothing.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 2,115,329 to Dreyfus; U.S. Patent No. 1,629,769 to Watson; and U.S. Patent No. 684,840 to Mercier et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (703) 605-4243. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Jeremy R. Pierce  
Examiner  
Art Unit 1771

July 25, 2003



Elizabeth M. Cole  
ELIZABETH M. COLE  
PRIMARY EXAMINER